LISTING OF CLAIMS:

Please rewrite the claims as follows:

Claims 1 – 20 (Cancelled)

21. (Previously Presented) A device comprising first and second inlet passages for respective immiscible fluids, the first and second inlet passages merging into a third passage along which, in use, the two fluids flow under parallel laminar flow conditions, the third passage being formed with a constriction or other discontinuity, in use, causing the two fluids to form into a flow of alternate segments.

22. (Previously Presented) A device as claimed in claim 21, in which downstream portions of the inlet passages extend parallel with each other before merging to form the third passage.

23. (Previously Presented) A device as claimed in claim 21, in which said other discontinuity in the third passage comprises a region of changed surface energy.

24. (Previously Presented) A device as claimed in claim 21, in which said other discontinuity comprises a region of altered or alterable contact angle.

25. (Previously Presented) A device as claimed in claim 21, in which said other discontinuity comprises one or more further passages joining the third passage.

26. (Previously Presented) A device as claimed in claim 21, comprising a further inlet passage for a third fluid, the further inlet passage merging into the third passage upstream of the constriction or other discontinuity.

27. (Previously Presented) A device as claimed in claim 21, in which the third or outlet passage is formed with a second constriction or other discontinuity downstream of the first constriction or other discontinuity.

28. (Previously Presented) A device as claimed in claim 21, wherein the surfaces of the third passage which, in use, are in contact with said fluids comprise a fluoropolymer.

29. (Previously Presented) A device as claimed in claim 21, further comprising a source of electromagnetic radiation for polymerising or cross-linking the content (or part) of liquid segments produced downstream of the constriction or other discontinuity.

30. (Previously Presented) A device as claimed in claim 21 wherein the third passage is provided with an enlargement in cross-section downstream of the constriction or other discontinuity.

31. (Previously Presented) A method of producing a segmented flow of first and second immiscible fluids comprising
(i) providing a device with a first conduit provided with a constriction or other discontinuity
(ii) causing the first and second immiscible fluids to flow under laminar flow conditions along said first conduit, wherein the constriction or other discontinuity causes the first and second immiscible fluids to form into a flow of alternate segments downstream of the constriction or other discontinuity.

32. (Previously Presented) A method as claimed in claim 31 wherein the device is provided with first and second inlet passages for the delivery of the first and second immiscible fluids respectively to the first conduit.

33. (Previously Presented) A method as claimed in claim 31 wherein the first and second inlet passages merge into the first conduit.

34. (Previously Presented) A method as claimed in claim 31 wherein the first and second inlet passages merge into the first conduit and downstream portions of the first and second inlet passages extend parallel with each other before merging to form the first conduit.

35. (Previously Presented) A method according to claim 31 wherein the surface of said first conduit in contact with said first and second immiscible fluids comprises a fluoropolymer.

36. (Previously Presented) A method according to claim 31 wherein the flow rates of the first and second immiscible fluids in the first conduit are mutually different.

37. (Previously Presented) A method according to claim 31 wherein the first and second immiscible fluids are exposed to ultra-violet radiation downstream of the constriction or other discontinuity.

38. (Previously Presented) A method according to claim 31 wherein the contents (or part) of liquid segments are polymerised or cross-linked by exposure to electromagnetic radiation.

39. (Previously Presented) A method as claimed in claim 31 comprising causing segments of at least one of the first and second fluids to form a substantially spherical shape.

40. (Previously Presented) A fluid manipulation device comprising first and second ducts for the passage of respective immiscible fluids, each of said first and second ducts having a respective inlet for the introduction of said respective fluid into said device, wherein said first and second ducts join to form a third duct along which, in use, the first and second fluids flow under laminar flow conditions, the third duct being formed with a constriction, the constriction causing, in use, the first and second fluids to form into a flow of alternate segments, wherein the device comprises two substrates disposed face-to-face, the surface of at least one of the substrates being profiled such that the first, second and third ducts are defined between the two substrates, the surfaces of the third duct that, in use, comes into contact with one or both of the first or second fluid comprising a fluoropolymer.

41. (Previously Presented) A fluid manipulation device according to claim 40 wherein the surfaces of the first and second ducts that, in use, are in contact with the respective first and second fluids comprise a fluoropolymer.

42. (Previously Presented) A fluid manipulation device according to claim 40 wherein the two substrates are held together by outer members.

43. (New) A fluid manipulation device according to claim 42 wherein the substrates are encased within two or more casement layers.

44. (New) A fluid manipulation device according to claim 43 wherein the substrates are disposed within a cavity formed by the casement layers.

45. (New) A fluid manipulation device according to claim 43 wherein the substrates are disposed within a cavity formed by the casement layers and the depth of the cavity is less than the combined thickness of the two substrates.

46. (New) A fluid manipulation device according to claim 43 wherein the casement layers are provided with interlocking configurations for aligning the casement layers relative to one another.

47. (New) A fluid manipulation device according to claim 43 wherein an input duct is provided in a casement layer and an output duct is provided in a casement layer, the input duct being in fluid communication with the first or second duct for transfer of fluid to the first or second duct and the output being in fluid communication with the third duct for transfer of fluid from the third duct to the output duct.

48. (New) A method according to claim 32 wherein the device comprises two substrates disposed face-to-face, the surface of at least one of the substrates being profiled such that the first and second inlet passages are defined between the two substrates, wherein the substrates are encased within tow or more casement layers.

49. (New) A device according to claim 21 comprising two substrates disposed face-to-face, the surface of at least one of the substrates being profiled such that the first and second inlet passages are defined between the two substrates, wherein the substrates are encased within two or more casement layers.